

Serial No. 09/847,347
Amdt. dated May 12, 2004
Reply to Office Action of February 13, 2004

Docket No. K-282

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) In a communication system including a base transceiver station and a base station controller controlling the base transceiver station, an apparatus for monitoring asynchronous transfer mode cells in a communication system comprising:

a receive interface part established in the base station controller, the receive interface part recording a cell to be monitored in a storage part by checking latched VPI/VCI of asynchronous transfer mode cells received from the base transceiver station by the base station controller, the receive interface part counting the number of error occurrence by checking header errors of the cells; and

a transmission interface part established in the base station controller, the transmission interface part transferring a test cell produced for checking a cell transmission time between the base transceiver station and the base station controller to the base transceiver station.

2. (Original) The apparatus of claim 1, the receive interface part includes:

a first storage part storing the cell to be monitored temporarily;

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a second storage part outputting a data corresponding to the latched VPI/VCI of the cell;

a third storage part outputting a VPI index value of an address designated by the data outputted from the second storage part; and

a fourth storage part storing the number of error occurrence of the cell at the other address designated by the VPI index value.

3. (Original) The apparatus of claim 2, wherein the third and fourth storage parts are RAMs having dual ports.

4. (Original) The apparatus of claim 2, wherein the first storage part outputting a previously-stored cell in advance.

5. (Original) The apparatus of claim 2, wherein the second storage part outputs a data when there exists a matched VPI/VCI by comparing the VPI/VCI of the cell to a reference value.

6. (Original) The apparatus of claim 2, wherein the test cell is stored in the first storage part by being transferred from the base transceiver station to the base station controller.

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7. (Original) The apparatus of claim 1, further comprising:
a GPS receiver receiving a time information packet from GPS, the GPS receiver providing the receive and transmission parts with the time information packet; and
a controller producing a test cell including a time information provided by the GPS receiver or checking a cell transmission delay time by comparing transceiving time of a cell loop-backed from the base transceiver station.

8. (Original) The apparatus of claim 7, wherein the receive and transmission parts are provided with the time information with which the respective interface parts are provided when the test cell is transceived from/to the base station controller to/from the base transceiver station.

9. (Original) The apparatus of claim 1, wherein the VPI/VCI is latched with hardware.

10. (Original) The apparatus of claim 1, wherein the base transceiver station and the base station controller are interfaced by E1.

11. (Original) The apparatus of claim 1, wherein the transmission and receive

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interface parts are established in a function part multiplexing/demultiplexing a cell inputted from an asynchronous transfer mode cell switch included in the base transceiver station or the base station controller.

12. (New) A method of monitoring cells in a communication system, comprising:

recording a cell to be monitored by checking identifiers of cells received from a base transceiver station by a base station controller;

counting a number of error occurrences by checking header errors of cells; and transferring a cell to the base transceiver station to check a cell transmission time between the base transceiver station and the base station controller.

13. (New) The method of claim 12, further comprising:
outputting a virtual path identifier index value of an address designated by said outputted data; and
storing the number of error occurrences of the cell at the address designated by the virtual path identifier index value.

14. (New) The method of claim 13, further comprising:
temporarily storing the cell to be monitored; and

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outputting a data corresponding to the identifier of the cell.

15. (New) The method of claim 13, further comprising outputting a previously-stored cell in advance.

16. (New) The method of claim 13, further comprising outputting a data when there exists a matched identifier by comparing the identifier of the cell to a reference value.

17. (New) The method of claim 13, further comprising storing said transferred cell by transferring from the base transceiver station to the base station controller.

18. (New) The method of claim 12, wherein the identifiers are matched identifiers.

19. (New) The method of claim 12, further comprising:
receiving time information from a global positioning system;
producing said transferred cell by including said received time information; and
checking a cell transmission delay time by comparing transceiving time of said transferred cell loop-backed from the base transceiver station.

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20. (New) The method of claim 12, further comprising interfacing said base transceiver station and said base station controller by E1.

21. (New) The method of claim 12, wherein said cells are asynchronous transfer mode cells.

22. (New) The method of claim 12, wherein said latched identifiers are virtual path/channel identifiers.

23. (New) The method of claim 12, wherein said transferred cell is a test cell.

24. (New) The method of claim 12, wherein said transferred cell includes time of date information.

25. (New) In a communication system including a base transceiver station and a base station controller, an apparatus for monitoring cells in a communication system comprising:

a receive interface part established in the base station controller, the receive interface part recording a cell to be monitored in a storage part by checking latched identifiers of cells received from the base transceiver station by the base station controller, the receive

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interface part counting the number of error occurrence by checking header errors of the cells;
and

a transmission interface part established in the base station controller, the transmission interface part transferring a cell to the base transceiver station to check a cell transmission time between the base transceiver station and the base station controller.
